DOCUMENT RESUME

ED 482 674 SP 041 803

AUTHOR	Yetkin, I. Elif
TITLE	Self-Efficacy and Prior Experiences as Predictors of Prospective Teachers' Teaching Anxiety.
PUB DATE	2003-10-00
NOTE	17p.; Paper presented at the Annual Meeting of the Mid-Western Educational Research Association (Columbus, OH, October 15-18, 2003).
PUB TYPE	Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE	EDRS Price MF01 Plus Postage. PC Not Available from EDRS
DESCRIPTORS	*Anxiety; Elementary Secondary Education; Higher Education; Preservice Teacher Education; *Prior Learning; *Self Efficacy; *Student Teacher Attitudes; Student Teachers; *Teacher Effectiveness; *Teaching Experience

ABSTRACT

This study aimed to explain prospective teachers' anxiety about teaching in relation to their teaching efficacy beliefs and prior teaching experiences. Participants included 27 preservice teachers. Three instruments were used: Student Teacher Anxiety Scale (STAS), Prior Experiences in Teaching Questionnaire (PETQ), and Teachers' Sense of Efficacy Scale (TSES-Short Form). The predictor variables were prior teaching experience, number of teaching methods courses taken, and teaching efficacy, and the criterion variable was teaching anxiety. Correlation analysis demonstrated that teaching anxiety was negatively correlated with teaching efficacy. Regression analyses were carried out to determine the predictors of teaching anxiety. Results indicated that the regression equation of teaching anxiety, including all predictor variables, explained 40 percent of the variation in teaching anxiety. Teaching efficacy was found as the only significant predictor in the equation. (Contains 15 references.) (Author/SM)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 482 674

SELF-EFFICACY AND PRIOR EXPERIENCES AS PREDICTORS OF PROSPECTIVE TEACHERS' TEACHING ANXIETY

I. Elif Yetkin

yetkin.1@osu.edu

The Ohio State University

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

I. Elif Yetkin

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

Paper presented at the annual meeting of the Mid-Western Educational Research Association, October 18, 2003. Columbus, OH.

SP041803

BEST COPY AVAILABLE

Self-Efficacy and Prior Experiences as Predictors of Prospective Teachers' Teaching Anxiety

Abstract

This study aimed to explain prospective teachers' anxiety about teaching in relation to their teaching efficacy beliefs and prior teaching experiences. Participants included 27 preservice teachers. Three instruments were used: *Student Teacher Anxiety Scale (STAS), Prior Experiences in Teaching Questionnaire (PETQ),* and *Teachers' Sense of Efficacy Scale (TSES-Short form).* The predictor variables were prior teaching experience, number of teaching method courses taken, and teaching efficacy, and the criterion variable is teaching anxiety. Correlation analysis demonstrated that teaching anxiety is negatively correlated with teaching efficacy. Regression analyses were carried out to determine the predictors of teaching anxiety. Results indicated that the regression equation of teaching anxiety including all predictor variables explained 40% of the variation in teaching anxiety. Teaching efficacy was found as the only significant predictor in the equation.

Introduction

Most teachers have recognized the early years of their career as a stressful experience. Teaching anxiety is one of the motivational dysfunction that most prospective teachers have experienced when they enter complex classroom settings. Gardner and Leak (1994) conceptualized teaching anxiety as anxiety that teachers experience in relation to teaching activities involving the preparation and execution of classroom activities. Although most frequently reported anxieties have been the same for the experienced and prospective teachers (e.g. control and discipline, motivating students, dealing with individual differences) some anxieties might be unique to inexperienced teachers such as anxiety about supervisor's opinion, or the class teacher's opinion (Capel, 1993; Hart, 1987). Teaching anxiety would have some impact upon teachers' behavior and might influence pupil behavior as well. Parkay, Greenwood and Olejnik (1988) reported that teachers with low stress and anxiety had fewer discipline problems in their classes and better relationships with superiors, colleagues, and students' parents. Research findings have supported that high level of anxiety about teaching would have a detrimental effect upon the transition of teacher candidates into the profession (Pigge & Marso, 1991).

A number of studies looked at sources of anxiety on teaching practice. In an early study, Veenman (1984) identified eight problems perceived by beginning teachers, namely classroom discipline, motivating students, dealing with individual differences, assessing students' work, relationships with parents, organization of classwork, insufficient and/or inadequate teaching materials and supplies, and dealing with problems of individual students. On the other hand, Capel (1993) examined the sources of anxiety

in physical education teachers in their first and second year of teaching and found that most anxiety is being caused by assessment by school staff and /or the adviser, and how school staff may react to one or more unsuccessful lessons.

Although many studies have explored the sources of teaching anxiety, only few of them have considered the underlying behavioral and cognitive factors that cause these anxieties emerge. This study aimed to explain teaching anxiety by prior experiences, which is focused by Drive Theory and self-efficacy beliefs, which is emphasized by Social Cognitive Theory.

Drive Theory, based on Hull's learning theory, explains learning of a new behavior in terms of a function of drive and habit (Weiner, 1992). Drive is considered as a nondirectional energizer of behavior, resulted from psychological disequilibrium and initiates behaviors to return to a state of equilibrium. Habit is based on the frequency of prior experiences of conditioned and unconditioned stimuli. According to Drive Theory, teaching anxiety is caused by a stimulus-specific response, which occurs when poor or inexperienced teacher labels the ordinary arousal associated with teaching as anxiety (Gardner & Leak, 1994). Such labeling could then lead to expectations and even condition anxiety in the presence of teaching- related stimuli. Drive Theory is criticized that it does not account for personal factors that help people manage and control their own behavior.

Social Cognitive Theory brought a different perspective in the explanation of teaching anxiety. Unlike behavioral perspectives, it accounts for reciprocal determinism, the idea that behavior, personal factors, and environmental events work together and determine each other in the self-system (Bandura, 1986). Self-efficacy, which is defined

as the judgments of capacity to achieve certain goals, occupies a central role in Social Cognitive Theory. Teachers' sense of efficacy, that is the result of actual and vicarious experience, verbal persuasion and psychological state, could be one of the predictors of teaching anxiety.

Teacher efficacy is defined as a belief that one's ability that can bring about positive changes in students' behaviors and achievement (Czerniak & Chiarelott, 1990). Without a belief in their ability to influence students' performance, teachers cannot accept responsibility for motivating student learning (Dembo & Gibson, 1986). Teachers may believe that environment and other factors beyond their control limit their abilities to bring about change in children. Such teachers feel helpless and give up trying to help children learn.

Studies have suggested a relationship between teacher self-efficacy, teacher performance and student achievement. High levels of efficacy have been related to greater student achievement, greater teacher commitment to student achievement as well as higher expectations for children (Ashton & Webb, 1986 as cited in Czerniak & Chiarelott, 1990; Gibson & Dembo, 1984). Teachers with high levels of efficacy seem to take personal responsibility for students' learning and they persist in helping students with difficulties in learning.

Social Cognitive Theory suggests that feeling of inefficacy results in anxiety that leads to avoidance of situations that arouse feelings of inefficacy (Czerniak & Chiarelott, 1990). When a teacher dwells on personal deficiencies, perceived or real, and imagines potential difficulties, anxiety is produced. For this reason, teachers who felt powerless to affect in a positive way, demonstrate less commitment to helping students learn and give

up quickly on children who failed (Gibson & Dembo, 1984). Teachers' repeated negative experiences with teaching such as few role models, lack of time for preparing for teaching, and lack of content background to teach the subject effectively might also result in low sense of efficacy that produces high levels of anxiety towards teaching. Once teachers have had repeated bad experiences with teaching, their perceptions of capabilities are affected negatively. This leads to inferior images of self and ability and results in anxiety (Czerniak & Chiarelott, 1990).

Paese and Zinkgraf (1991) assessed the level of stress and efficacy at the beginning and end of a traditional student-teaching experience in physical education. Teacher stress was measured in terms of role ambiguity, role overload, role preparedness, job satisfaction, and illness symptoms. Teacher efficacy is measured in terms of general beliefs that teachers can have positive impact on students as well as their individual beliefs that they can personally impact draw out positive change in the students. The results indicated that as student teachers perceive less role uncertainty and became better prepared to teach, their beliefs that they can personally elicit positive change in the students become stronger. Also as student teaching progressed and they feel more satisfied with teaching, they have strong feelings of personal teacher efficacy. These results show that as student teaching progressed, there was less stress since they became clearer in their expectations, and their own effectiveness as teachers.

Recent research indicates that teaching anxiety negatively affects teachers' performance, their classroom management behaviors, their persistence, responsibility and commitment of students' learning and achievement. If teaching anxiety results from some behavioral and cognitive factors as predicted, then the problem can be solved by

cognitive restructuring and increasing the quantity and quality of teaching experiences during graduate training or the early years of teaching. Understanding the role of self-efficacy beliefs and prior experiences on teaching anxiety provides researchers insights to develop teacher education programs that address the reduction of teaching anxiety. This study was undertaken in an effort to explain teaching anxiety by prior experiences and self-efficacy beliefs. The major research question was "To what extent do prior teaching experiences and teaching efficacy beliefs predict teaching anxiety of prospective teachers?"

Methods

Participants

Twenty-seven preservice teachers from a university in a Midwestern United States were participated in the study. Most of the subjects currently enrolled in the M.Ed program in this university and few participants got their teaching certificate but have not taught grades K-12 as a teacher. All subjects have teaching experiences. Most of them have either completed or have been currently doing student teaching as a requirement of the program they enrolled. Some of them have participated First Education Experience Program in their undergraduate. Further, some of them have taught in summer schools, summer camps, churches or worked as a substitute teacher. The amount of teaching experience has varied from few weeks to several years (at most 5 years).

Measures

The predictor variables were prospective teachers' efficacy beliefs and prior teaching experiences, which constitutes perceptions of the nature of prior experiences and

the number of teaching method courses taken. The criterion variable was teaching anxiety. Three instruments were used to collect data.

The level of anxiety about teaching was measured by *Student Teacher Anxiety Scale (STAS)* developed by the researcher by the adaptation of the selected items from *Student Teacher Anxiety Scale* (Hart, 1987), *Science Teaching Anxiety Scale* (Yuruk, unpublished manuscript) and *Teaching Anxiety Scale* (Parsons, 1973). The scale contained 22 items each of which asks how preservice teachers feel about the situations that might be a source of teaching anxiety. Participants were asked to choose one of the fourteen weighted adjectives that best describes their feelings in that situation. The adjectives are "wonderful", "fine", "comfortable", "steady", "doesn't bother me", "indifferent", "timid", "unsteady", "nervous", "worried", "unsafe", "frightened", "panicky", and "scared stiff." An example of the items is "How would you feel about giving each child the attention she/he needs without neglecting other?" The higher scores indicated higher level of teaching anxiety. Reliability was found to be 0.86.

Prospective teachers' prior experiences related to teaching was measured by *Prior Experiences in Teaching Questionnaire (PETQ)* developed by the researcher. The questionnaire consisted of two sections. In the first section, participants were asked to answer questions about their program and their major, and the number of teaching methods courses they took. They also were asked how much teaching experience they had, the description of their experience and how they felt during their experience. The second section of the questionnaire included 9 Likert type items assessing their perceptions of prior experiences about teaching. Items were scored on a scale of 1 representing *Strongly Disagree* to 5 representing *Strongly Agree* while the negative

statements are scored in the opposite way. Participants were asked to choose the most appropriate response for each statement. An example of an item is " I had difficulty in explaining the concepts." The higher scores indicated positive perceptions of the prior teaching experiences. Reliability was found to be 0.79.

Teachers' Sense of Efficacy Scale (TSES-Short form) developed by Tschannen-Moran and Woolfolk Hoy (2001) was used in order to assess prospective teachers' self-efficacy beliefs related to teaching. The scale included twelve Likert type items under three subscales: Efficacy in Student Engagement, Efficacy in Instructional Practices, and Efficacy in Classroom Management. The participants were asked to select the most appropriate response reflecting their opinion about particular situations ranging from "nothing", "very little", "some influence", to "quite a bit" and "a great deal." An example of an item is "How much can you do to control disruptive behavior in the classroom?" Reliability of the instrument is .90. The higher scores indicated higher level of efficacy beliefs.

Procedure

Participants were informed about the study and asked for their participation. Voluntary students completed three questionnaires. Some of the participants were given the questionnaires and asked to return after they completed. Some participants completed the questionnaires during the class hour.

Data Analysis

Data analysis was carried out by using SPSS. Descriptive statistics were performed to describe the features of the sample. Mean scores and standard deviations were calculated for each scale. Correlation analysis was conducted to determine the

relationship between each predictor variable and teaching anxiety of prospective teachers. A linear regression procedure was used in order to determine whether there would be significant predictive effects of efficacy beliefs, and prior experiences on teaching anxiety.

Results

The mean scores and standard deviation of the variables are presented in Table 1.

Table 1

Means, Standard Deviations for Test Anxiety and Predictor Variables (Teaching Efficacy, Perceptions of Prior Experiences, Number of Teaching Methods Courses Taken)

Variable	M	SD
Teaching Anxiety (TA)	26.46	10.84
Predictor variable		
Teaching Efficacy (TE)	5.98	.91
Perception of Prior Experiences (PPE)	3.85	.51
Number of Teaching Methods Courses Taken (#TMC)	2.26	1.06

N=27

Prospective teachers' mean score of teaching anxiety was 26.46 (out of 94), of teaching efficacy was 5.98 (out of 8); and of perception of prior experience was 3.85 (out of 5). The average number of method courses taken was 2. The mean scores of predictive variables indicated relatively low teaching anxiety, high teaching efficacy, and positive perceptions of prior teaching experience.

Correlations between all pairs of variables employed in the study are displayed in Table 2. Only one significant correlation was found between the criterion and predictor

variables. There was a significant negative correlation between teaching anxiety and teaching efficacy. ($r=-.61$, $p<.01$) which indicates that prospective teachers with low self efficacy tended to have high teaching anxiety level. Although perception of prior experiences was also negatively correlated with teaching anxiety scores, the correlation was not significant ($r=-.21$). Similarly, number of courses taken was not found significantly correlated with teaching anxiety. Two significant correlations were found between predictor variables. Perception of prior experiences was significantly positively correlated with teaching efficacy ($r=.44$, $p<.05$) and number of teaching method courses taken ($r=.39$, $p<.05$).

Table 2

Intercorrelations for Test Anxiety and Predictor Variables (Teaching Efficacy, Perceptions of Prior Experiences, Number of Teaching Methods Courses Taken)

Variable	TA	TE	PPE	#TMC
Teaching Anxiety (TA)	--	-.61**	-.21	-.15
Teaching Efficacy (TE)		--	.44*	.02
Perception of Prior Experiences (PPE)			--	.39*
Number of Teaching Methods Courses Taken (#TMC)				--

**p<.01, *p<.05.

To determine the combined predicted effects of predictor variables on teaching anxiety, regression analysis was utilized. Table 3 displays the results of the regression analysis. The multiple regression equation containing the four predictor variables was significant and explained 40% of the variance in teaching anxiety, $F(3,23) = 5.20$ and

$p < .01$, adjusted $R^2 = .33$. Standardized multiple regression coefficients and squared part correlations were then reviewed to assess the relative importance of these variables in predicting teaching anxiety. Table 3 shows that only efficacy beliefs had statistically significant β weights at 0.01. The calculations of squared part correlations indicated that efficacy belief scores accounted for approximately 35 % of the unique variance in teaching anxiety beyond that accounted for by the other predictors. Teaching efficacy was found to be the only significant predictor of teaching anxiety. Since significant correlations were found between predictor variables, multicollinearity was also checked by computing VIF values. VIF values were smaller than 2, which indicated that there was no multicollinearity problem.

Table 3

Regression Analysis for Test Anxiety and Predictor Variables (Teaching Efficacy, Perceptions of Prior Experiences, Number of Teaching Methods Courses Taken)

Variable	B	SEB	β
Teaching Efficacy (TE)	-7.99	2.16	-.67**
Perception of Prior Experiences (PPE)	3.56	4.24	.17
Number of Teaching Methods Courses Taken (#TMC)	-2.01	1.82	-.20

Note. $R^2 = .40$ ($N=27$, $p<.01$), **$p < .01$.

Discussion

Teaching efficacy was found as the only significant predictor of teaching anxiety. Negative β value for teaching efficacy indicated that prospective teachers with high teaching efficacy tend to have less teaching anxiety. The number of teaching method courses taken and perception of the nature of prior teaching experience were not found as significant predictors of teaching anxiety. The effect of perception of the nature of prior teaching experiences might be confounded by teaching efficacy since there was a significant correlation between these predictors. When effect size is considered, R^2=.40 is not large, probably due to small sample size. In addition to small sample size, another limitation of the study is using self-reports as measures. Since prospective teachers might be reluctant to discuss their teaching anxiety and efficacy beliefs, self-reports were used instead of interviews. However, self-report instruments might not provide their true feelings and opinions.

Drive Theory proposes the reduction of tension as the basis for any behavior. Therefore, any physical and psychological needs activate the individual to behave in a certain way to counteract these needs. Moreover, learning any behavior is a function of the likelihood and frequency of past or present experience. Applying these concepts of the theory, teaching anxiety is caused by a stimulus-specific response when prospective teachers label the ordinary arousal associated with a teaching experience as anxiety. Such labeling could then lead to condition anxiety in the presence of teaching- related stimuli. In other words, increases in negative teaching experiences elevate the generalization of prior experience into consequent teaching experiences. Findings did not confirm Drive

Theory, possibly due to the confounding effect of teaching efficacy, or the limitation of the measurement instruments and small sample size.

The results supporting that teaching efficacy was a significant predictor of teaching anxiety align with Social Cognitive Theory. Self-efficacy influences the choices teachers make and the actions they pursue. Like many people, prospective teachers tend to select tasks and activities in which they feel competent and confident and avoid those in which they do not. Unless they believe that their actions will have successfully affect students learning, they have little incentive to engage in those actions. When they do not expect successfully accomplish the tasks, they do not put much effort on their teaching, they do not persist when they confront obstacles, and they can not easily recover from unpleasant situations. Therefore, any situation that they feel inefficacious may causes them feeling anxious. In this way, self-efficacy beliefs influence teachers' thought patterns and emotional reactions.

High self-efficacy helps prospective teachers create feelings of serenity in approaching difficult tasks and activities. Conversely, teachers with low self-efficacy may believe that things are tougher than they really are, which is likely to lead to reduce performance, that fosters teaching anxiety. When prospective teachers experience negative thoughts and fears about their capabilities, those affective reactions can themselves lower self-efficacy perceptions and prompt additional stress and anxiety.

Since one of the sources of self-efficacy beliefs is mastery experiences, teaching anxiety can be reduced by providing prospective teachers opportunities to experience the sense of self-efficacy as a result of success. Negative vicarious experiences might cause them to form low teaching efficacy beliefs, which eventually cause teaching anxiety.

Therefore, learning new concepts or skills in small, hierarchical steps, modeling desired behaviors or attitudes, and learning cognitive coping skills increase self-efficacy, which in turn decrease teaching anxiety.

References

Bandura, A. (1986). Social foundations of thought and action: a social cognitive theory. Englewood Cliffs, NJ: Prenntice-Hall.

Capel, S. A. (1993). Anxieties of beginning physical education teachers. *Educational Research, 35,3,* 281-289.

Czerniak, C., & Chiarelott, L. (1990). Teacher education for effective science instruction - A social cognitive perspective. *Journal of Teacher Education. 14, 1,* 49-58.

Dembo, M. H., & Gibson, S. (1985). Teachers' sense of efficacy: An important factor in school improvement. *The Elementary School Journal, 86, 2,* 173-184.

Gardner, L.E., & Leak, G.K. (1994). Characteristics and correlates of teaching anxiety among college psychology teachers. *Teaching of Psychology, 21(1),* 28 - 32.

Gibson, S., & Dembo, M.H. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology, 76,4,* 569-582.

Hart, N. I. (1987). Students teachers' anxieties: four measured factors and their relationships to pupil disruption in class. *Educational Research, 29,* 12-18.

Paese, P. c. (1991). The effect of student teaching on teacher efficacy and teacher stress. *Journal of Teaching in Physical Education, 10,* 307-315.

Parkway, F. W., Greeenwood, G., Olejnik, S., & Proller, N. (1988). A study of the relationship among teacher efficacy, locus of control, and stress. *Journal of Research and Development in Education, 21,* 13-22.

Parsons, J. S. (1973). Assessment of Anxiety About Teaching Using the Teaching Anxiety Scale: Manual and Research Report. (ERIC Reproduction Services Document No. ED 07 9330).

Pigge, F.L. & Marso, R.N. (1991). Relationships between Teachers' Academic and Personality Attributes and Changes in Teaching Anxiety during Training and Early Teaching. Paper presented at the Annual Meeting of the Association of Teacher Educators (71st, New Orleans, LA, February 16-20, 1991). (ERIC Reproduction Services Document No. ED 329 550).

Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing and elusive construct. *Teaching and Teacher Education, 17,* 783-805.

Veenman, S. (1984). Perceived problems of beginning teachers. *Review of Educational Research, 54,* 143-178.

Weiner, B. (1992). *Human Motivation*: Thousand Oaks, CA: Sage Publications.

Yuruk, N. (2001). *The predictors of preservice elementary teachers anxiety about teaching science.* Unpublished manuscript.

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

ERIC Educational Resources Information Center

REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: SELF-EFFICACY AND PRIOR EXPERIENCES AS PREDICTORS OF PROSPECTIVE TEACHERS' TEACHING ANXIETY	
Author(s): I. Elif YETKIN	
Corporate Source:	Publication Date: OCTOBER 2003

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Level 1 ↑ ☐

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) *and* paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

Level 2A ↑ ☒

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Sample

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 2B ↑ ☐

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here, → please

Signature: Elif	Printed Name/Position/Title: I. Elif YETKIN	
Organization/Address: 1220 Chambers Road	Telephone: (614) 486-9146	FAX: —
	E-Mail Address: yetkin.1@osu.edu	Date: 10/09/2003

(Over)

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, *or*, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

ERIC CLEARINGHOUSE ON ASSESSMENT AND EVALUATION
UNIVERSITY OF MARYLAND
1129 SHRIVER LAB
COLLEGE PARK, MD 20742-5701
ATTN: ACQUISITIONS

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
4483-A Forbes Boulevard
Lanham, Maryland 20706

Telephone: 301-552-4200
Toll Free: 800-799-3742
FAX: 301-552-4700
e-mail: ericfac@inet.ed.gov
WWW: http://ericfacility.org

EFF-088 (Rev. 2/2001)